“Without geography, you’re nowhere” – Jimmy Buffett
Parcels and Streets: the foundation of good things to come..

- Both generate one-time funding and a potential stream of income for maintenance
- Enable immediate leverage to be put on freely available datasets such as soils, wetlands, elevations, etc.
- Facilitate the fast creation or reconciliation of complimentary layers (zoning, land use, special districts, city limits, etc)
- Enable Geocoding of nearly everything! (crimes, business licenses, etc) This puts traditional spreadsheets and databases in a spatial context quickly!

FAST ROI:

Analysis of parcel data for the City of Valdosta and city limit boundaries revealed $13.1 M in total property value that was incorrectly coded as being outside of the City.

15 minutes of analysis = >$1m in revenues.
Onward and upward! Fast creation of complimentary layers is made easy with a solid foundation.

- Zoning boundaries are quickly built using property boundaries.
- Crimes geocoded using street address ranges.
- Special district layers are generated using parcel digest values.

The production and maintenance of these layers generates:

- Quick project and maintenance income streams
- More possibilities for SPATIAL analysis and ROI for the community
Onto the REAL FUN(ding)!

- With a solid foundation in place, and some ground-floor layers, the opportunities for serious funding and community ROI follow.
  - Growth of information inventory from any and all sources
  - Communication of issues through visualization and analysis
  - Production of timely, actionable information
  - Integration of GIS into other decision-support systems

As you move UP the scale, project transferability becomes more important. Not just from community to community, but from practice to practice.
Land Ho!

Development Suitability of Parcels using Cumulative Scoring Model

- Analysis of over 50,000 land parcels with weighted scoring for transportation, wetlands, soils, railroad, utilities and acreage
- Analysis models constructed allows replication of this project in other communities as well as tuning of weight for each criteria category
- Delivered defendable results that were acted on by development authority.
From small dots to state dollars!

- Web based, secured application
- Started as a $3k pilot project. Continues as a $13k maintenance contract with State DHR
- Covers entire state and ALL well and septic system inspections/installations
- Links directly to state database
- Data is now used to generate pollution susceptibility indexes for certain critical resource areas in the state
Managing Stormwater made easy!

- Mobile Application using web services
- Real time data update and communication between field crew and office personnel.
- Mapping and reporting of inspections and maintenance combined.
- NPDES Phase II required permit reports for the state run from real time GIS data, allowing for digital submission.
- Work Orders created for maintenance required.
A valuable perspective on policing...

- Web based, secured application accessible from desktops and within patrol cars
- 3 second AVL updates for each car in fleet
- Real time crime reporting. Automatic geocoding of each incident immediately after submitted
- Access to crime analysis tools – “pin” map as well as real time density
- Search tools for property owners, addresses, streets, etc
- Includes real time charting for crash, burglary and part 1 crimes
The GIS bug bites Boll Weevil Eradication Foundation...

- Web based, secured application accessible from desktops
- As traps are placed in field, GPS records the location. Trap locations are uploaded nightly into mapping app
- Field locations/shapes are edited directly into mapping app by BWEF monitoring staff from their home computers.
- Real-time, online map generation tools for field use
- Generates ~$18k per year in maintenance/modifications and SGRC doesn’t EDIT/BUILD the data!
- Makes management of state cotton monitoring manageable for the 15 staff member BWEF
- Has delivered a tool to BWEF that finally accounts for actual acres of cotton each year
Secrets to Success..

- A **solid** foundation of property and street/road data is vital!
- Exploit the free resources of data! These can immediately get you hitting home runs for your communities
- Look for traditional data and map it! excel, sql, dbase, etc.
- RECYCLE data.
- INVEST in a solution to common needs around the district/state
- Strive to deliver actionable output!
- Make that investment into “transferable” technology. Not just from one community to next but from one application to the next. Example: code written for auto updates of crime data was exploited to make the BWEF trap location updates possible.
- **Embed your GIS outputs into current decision-support systems.** Example: burglary crash charting used by VPD, Or including reporting tools in apps that reduce cross-application workflows